

ABSTRACT

5 The methods of this invention relate to immunizing animals with conjugates of cytokines and a carrier to induce a prolonged high titre antibody response specific for the cytokine. This invention also relates to the treatment of pathological conditions, e.g., eosinophilia and allograft rejection, associated with the production of cytokines, in particular interleukins, e.g., IL-4, IL-5, IL-9, and IL-13, by immunization with the cytokine conjugates or by administration of antibodies specific for the cytokine. This invention also relates to compositions comprising the cytokine conjugates and the conjugates *per se*.